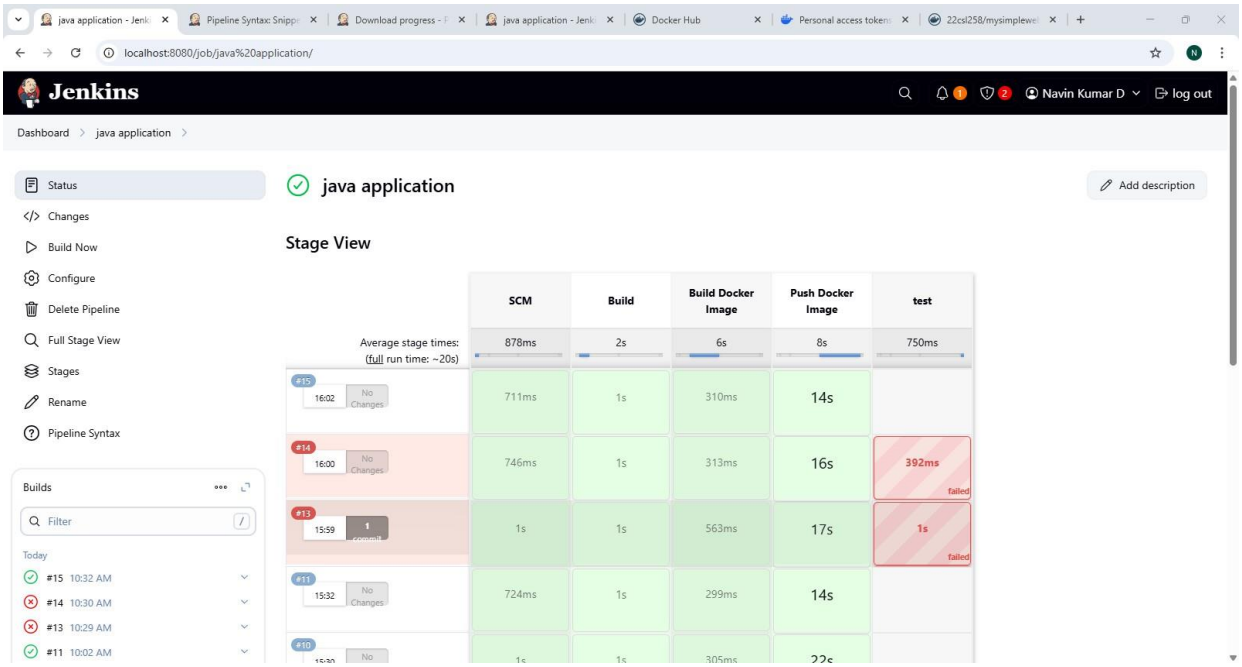
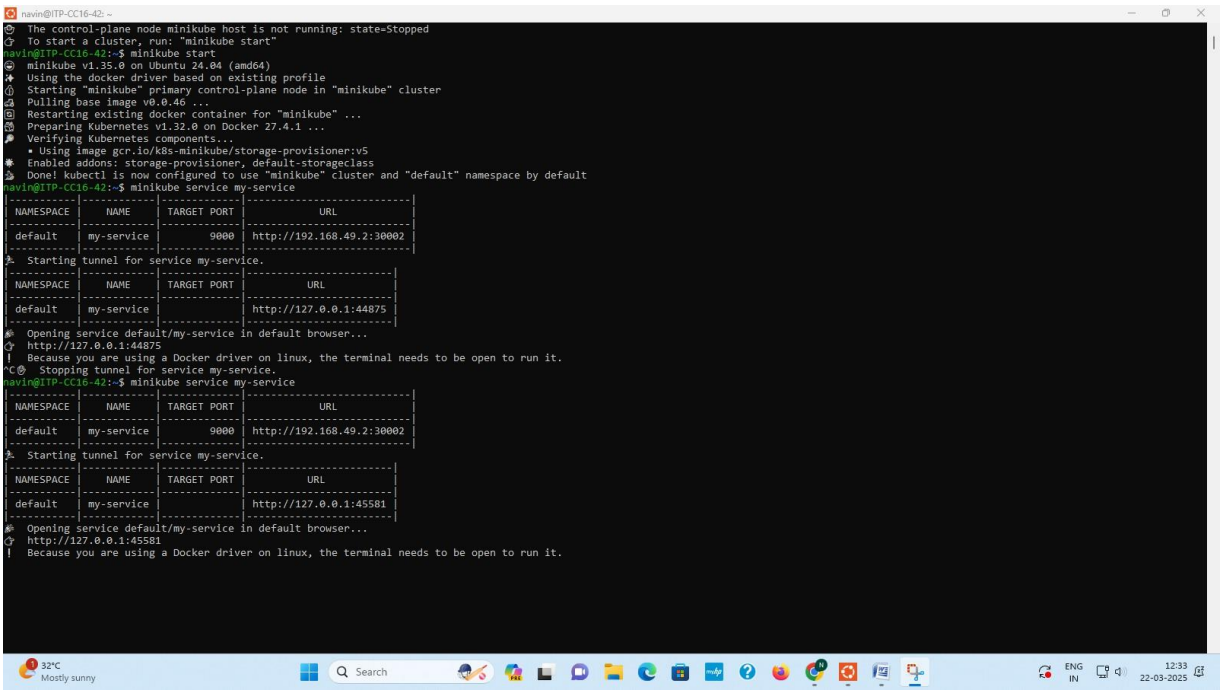
FINAL PROJECT

DAY-6

JAVA Application Minikube deployment





Pipeline script

Pipelinescript-

Jenkins JAVA

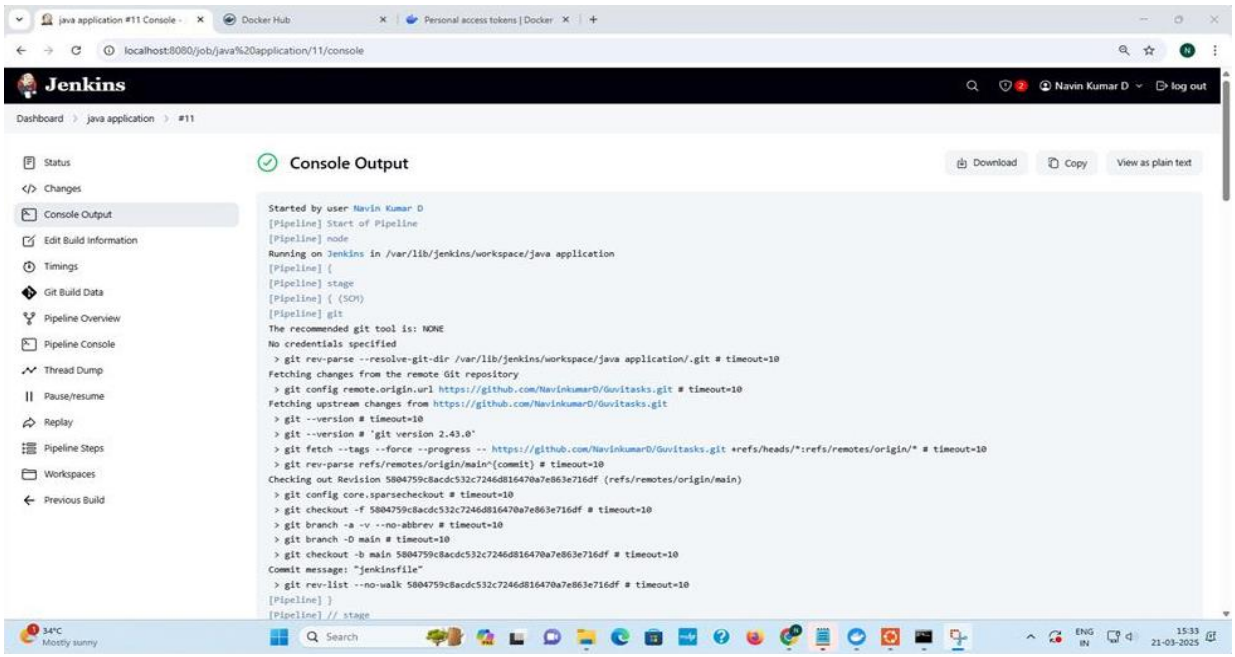
Application

```
pipeline {
   agent any

   stages { stage('scm'){
        steps{
   gitbranch:''  https://github.com/NavinkumarD/Guvi-Tasks-DevOps.git”
        }
   }
   stage('builb
      -clean'){
      steps {
        sh"mvn clean"
}
}
   stage('build-
      validate'){
      steps {
        sh"mvn validate"
```

```
}
}
        stage('buil
            d-com'){
            steps {
              sh"mvn compile"
}
}

        stage('buil
            d-test'){
            steps {
              sh"mvn test"
}
}
        stage('build-
            install'){
            steps {
              sh"mvn package"
}
}
stage('buildtoima
            ges'){
            steps {
              script{
```

```
            sh'docker build-t.'
          }
    }
}
stage('pushtohub
        '){ steps {
          script{
            withDockerRegistry(credentialsId:'Docker_cred',url: https://index.docker.io/v
            1/'){ sh 'docker push '
          }
        }
        }

}
      stage('Deploy
        App'){ steps
        {
          withKubeConfig(caCertificate:'',clusterName:'minikube',contextName:'minikube',
credentialsId:'mukubeconfig_011',namespace:'',restrictKubeConfigAccess:false,serverUrl:
                                  '') {
          sh'kubectlapply -fdeployment.yml --validate=false'
        }
      }
      }
   stage('Test'){ steps {
```

```
        withKubeConfig(caCertificate: '', clusterName: 'minikube', contextName: 'minikube',
credentialsId:'mukubeconfig_011',namespace:'',restrictKubeConfigAccess:false,serverUrl:
                                        '') {


       sh'minikubeservicemy-service--url|xargscurl'

   }

}

}

}

}
```



Deployment.yml

```
apiVersion:ap
ps/v1 kind:
Deployment
metadata:
  name: my-
  deploy
  namespace:m
  y-bank
  labels:
    name:my-
deploy spec:
  replicas:1
  selector:
    matchLabels:
      apptype:web-
  backend strategy:
    type:RollingUpdate
  template:
    metadata: labels:
        apptype:web-
    backend spec:
```

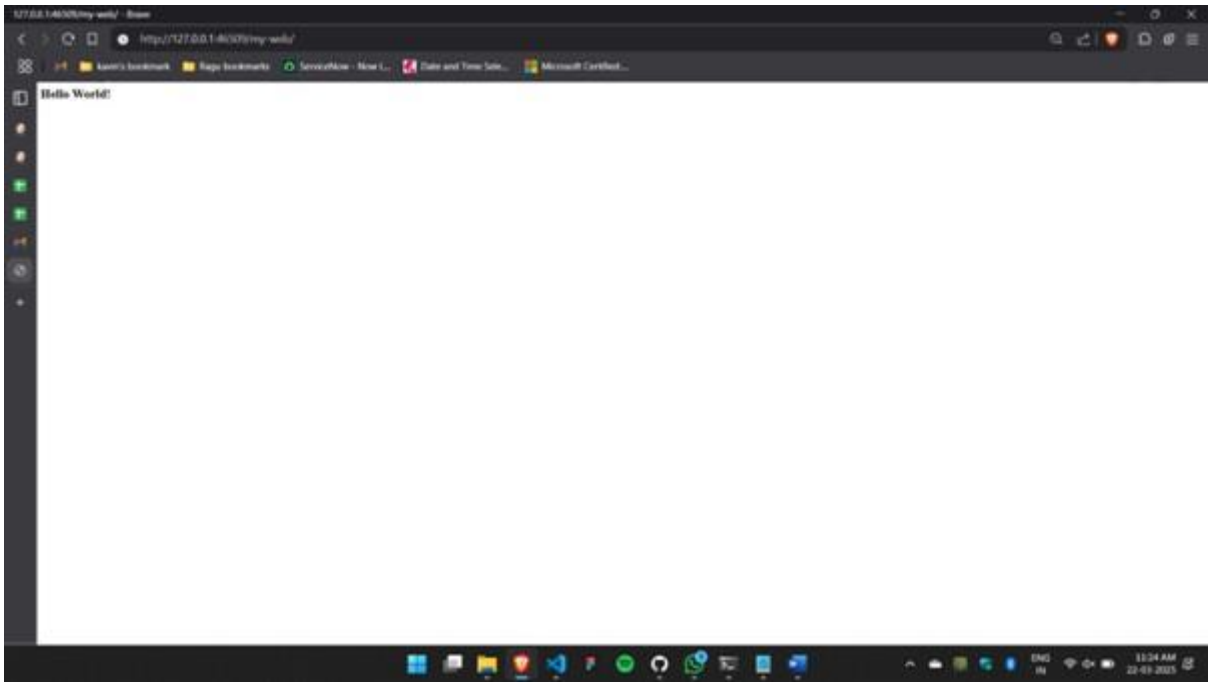
```
        containers:
        -name:my-web
          image:22csl258/mysimplewebapplication:tagnam
          e ports:
          -containerPort:9001
  apiVersion:
  v1 kind:
  Service
  metadata:
    name: my-
    service
    namespace:m
    y-bank
    labels:
      app:my-
  service spec:
    type:NodePo
    rt ports:
      -port:9001
       targetPort:8080
```

Service.yml

```
apiVersion: apps/v1
kind: Deployment
metadata:
  name: my-deploy
  labels:
    name: my-deploy
spec:
  replicas: 1
  selector:
    matchLabels:
      apptype: web-backend
  strategy:
    type: RollingUpdate
  template:
    metadata:
      labels:
        apptype: web-backend
    spec:
      containers:
      - name: my-app
        image: 22csl258/simplewebapp:latest
        ports:
```

```
        - containerPort: 9000

---

apiVersion: v1
kind: Service
metadata:
  name: my-service
  labels:
    app: my-service
spec:
  type: NodePort
  ports:
    - port: 9000
      targetPort: 8080
      nodePort: 30002
  selector:
    apptype: web-backend
```

```
navin@ITP-CC16-42:~$ sudo vim /etc/prometheus/prometheus.yml
navin@ITP-CC16-42:~$ promtool check config /etc/prometheus/prometheus.yml
Checking /etc/prometheus/prometheus.yml
 SUCCESS: /etc/prometheus/prometheus.yml is valid prometheus config file syntax

navin@ITP-CC16-42:~$
```


Hello World!